

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other				
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear			General								
Bending	Bend	Grain	Ovalized	Pressure/Forced							
Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure							
Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld							
Crushed/Crimped.	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled							
Cuffs	Contamination	Maintenance	Part Moved								
Heat Treat	Countersink	Mislabeled	Positioned Wrong								
Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge								
Ripples in Bend	Drill Holes	Offset									
Torque Waves in Extrusion	Drawing	Out of Calibration									
Turning Sequence	Finish	Out of Sequence									
Wave/Twist in Tube	Folio	Outside Dimensions									

Work Order ID 95710***95710***

Page 2

January-18-13 10:02:02 AM

Item ID: D2174-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Web

Start Date: 1/28/13 Start Qty: 6.00

6

Cust Item ID:

Required Date: 1/28/13 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

130

Small Fab

Small Fab

Small Fab

0.00

Memo

Deburr Stack

0.00

140

140

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

150

150

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

0.00

N/A

DAS
27
9-89

6 7G13-10-1

DQA: _____ Date: _____

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS																																																														
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>																																																													
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>																																																													
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>																																																													
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																																																														
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FAULT CATEGORY																																																																				
Landing Gear				<table border="0"> <tr> <td colspan="2">General</td> </tr> <tr> <td><input type="checkbox"/> Bending</td> <td><input type="checkbox"/> Bend</td> <td><input type="checkbox"/> Ovalized</td> <td><input type="checkbox"/> Pressure/Forced</td> </tr> <tr> <td><input type="checkbox"/> Centre Not Concentric to O/S</td> <td><input type="checkbox"/> BOM/Route</td> <td><input type="checkbox"/> Over/Under tolerance</td> <td><input type="checkbox"/> Temperature/Cure</td> </tr> <tr> <td><input type="checkbox"/> Cracks</td> <td><input type="checkbox"/> Broken/Damaged</td> <td><input type="checkbox"/> Part Incorrect</td> <td><input type="checkbox"/> Weld</td> </tr> <tr> <td><input type="checkbox"/> Crushed/Crimped.</td> <td><input type="checkbox"/> Burrs</td> <td><input type="checkbox"/> Part Lost/Missing</td> <td><input type="checkbox"/> Wrong Stock Pulled</td> </tr> <tr> <td><input type="checkbox"/> Cuffs</td> <td><input type="checkbox"/> Contamination</td> <td><input type="checkbox"/> Part Moved</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Heat Treat</td> <td><input type="checkbox"/> Countersink</td> <td><input type="checkbox"/> Positioned Wrong</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Inspection Strip in Tube</td> <td><input type="checkbox"/> Cut Too Short</td> <td><input type="checkbox"/> Power Loss/Surge</td> <td></td> </tr> <tr> <td><input type="checkbox"/> Ripples in Bend</td> <td><input type="checkbox"/> Drill Holes</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Torque Waves in Extrusion</td> <td><input type="checkbox"/> Drawing</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Turning Sequence</td> <td><input type="checkbox"/> Finish</td> <td></td> <td></td> </tr> <tr> <td><input type="checkbox"/> Wave/Twist in Tube</td> <td><input type="checkbox"/> Folio</td> <td></td> <td></td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> </tr> <tr> <td colspan="2"></td> <td></td> <td></td> </tr> </table>							General		<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced	<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure	<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld	<input type="checkbox"/> Crushed/Crimped.	<input type="checkbox"/> Burrs	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled	<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Part Moved		<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Positioned Wrong		<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes			<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing			<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish			<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio														
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<input type="checkbox"/> Hardware		<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure																																																																	
<input type="checkbox"/> Inspection Incomplete		<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld																																																																	
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<input type="checkbox"/> Mislabeled		<input type="checkbox"/> Positioned Wrong																																																																		
<input type="checkbox"/> Misread		<input type="checkbox"/> Power Loss/Surge																																																																		
<input type="checkbox"/> Offset																																																																				
<input type="checkbox"/> Out of Calibration																																																																				
<input type="checkbox"/> Out of Sequence																																																																				
<input type="checkbox"/> Outside Dimensions																																																																				

Work Order ID 95710

95710

Page 3

January-18-13 10:02:02 AM

Item ID: D2174-1

Accept

N900040100

Setup

Start

NS1

Revision ID:

Stop

NS2

Item Name: Web

Start Date: 1/28/13 **Start Qty:** 6.00

6

Cust Item ID:

Required Date: 1/28/13 **Req'd Qty:** 6.00

6

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

**Sequence ID/
Work Center ID**

**Operation
Description**

**Set Up/
Run Hours**

Tool ID

Tool #

**Plan
Code**

**Accept
Qty**

**Reject
Qty**

**Reject
Number**

**Insp.
Stamp**

160

160

QC

Quality Control

QC3- Inspect Part Finish

0.00

(6) B-10-01

DA
09
S-89

170

170

Packaging

Packaging

Identify as per dwg & Stock Location G-A

0.00

6x

Y/5/10/01

180

180

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

H/d 13-10-2

N (318-2)

NCR: Yes / No

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order: _____			DISPOSITION		AGAINST DEPARTMENT/PROCESS					
			Rework Scrap Use-as-is Work Order Update	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other			
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data										
Equip/Tooling										
Operator										
Material										
Setup										
Other										
Process										
Supplier										
Training										
Unapproved										
FAULT CATEGORY										
Landing Gear					General					
					Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion Turning Sequence Wave/Twist in Tube	Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish Folio	Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread Offset Out of Calibration Out of Sequence Outside Dimensions	Ovalized Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong Power Loss/Surge	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled	
									<input type="checkbox"/> Other	

Picklist Print

January-18-13 10:02:02 AM

Page 1

Work Order ID: 95710

Start Date: 1/28/13

Required Date: 1/28/13

Parent Item: D2174-1

Start Qty: 6.00

Required Qty: 6.00

Parent Item Name: Web

Comments: IPP C04.06.09ReformatKJ/RF
IPP Rev:D As per Rev E 06-11-22 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.063 2024-T3 .063 sheet		Purchased	No			100	sf	212.7400	0.4722	2.9823156 3.0		JM13-08-27	

Location	Loc Qty	Loc Code
MAT022	212.74	
119916	0.2	
121197	21.34	
123096	11.4	
123654	12.8	
123701	167	123701

NCR: Yes / No

WORK ORDER NON-COMPLIANCE / UPDATE

DQA: Date:

QA Closed: Date:

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>			
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
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Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
Bending	Bend	Grain	Ovalized	Pressure/Forced							
Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure							
Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld							
Crushed/Crimped	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled							
Cuffs	Contamination	Maintenance	Part Moved								
Heat Treat	Countersink	Mislabeled	Positioned Wrong								
Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge								
Ripples in Bend	Drill Holes	Offset									
Torque Waves in Extrusion	Drawing	Out of Calibration									
Turning Sequence	Finish	Out of Sequence									
Wave/Twist in Tube	Folio	Outside Dimensions									

DART AEROSPACE LTD	Work Order:	95710
Description: Web	Part Number:	D2174-1
Inspection Dwg: D2174	Rev: E	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

 First Article Prototype

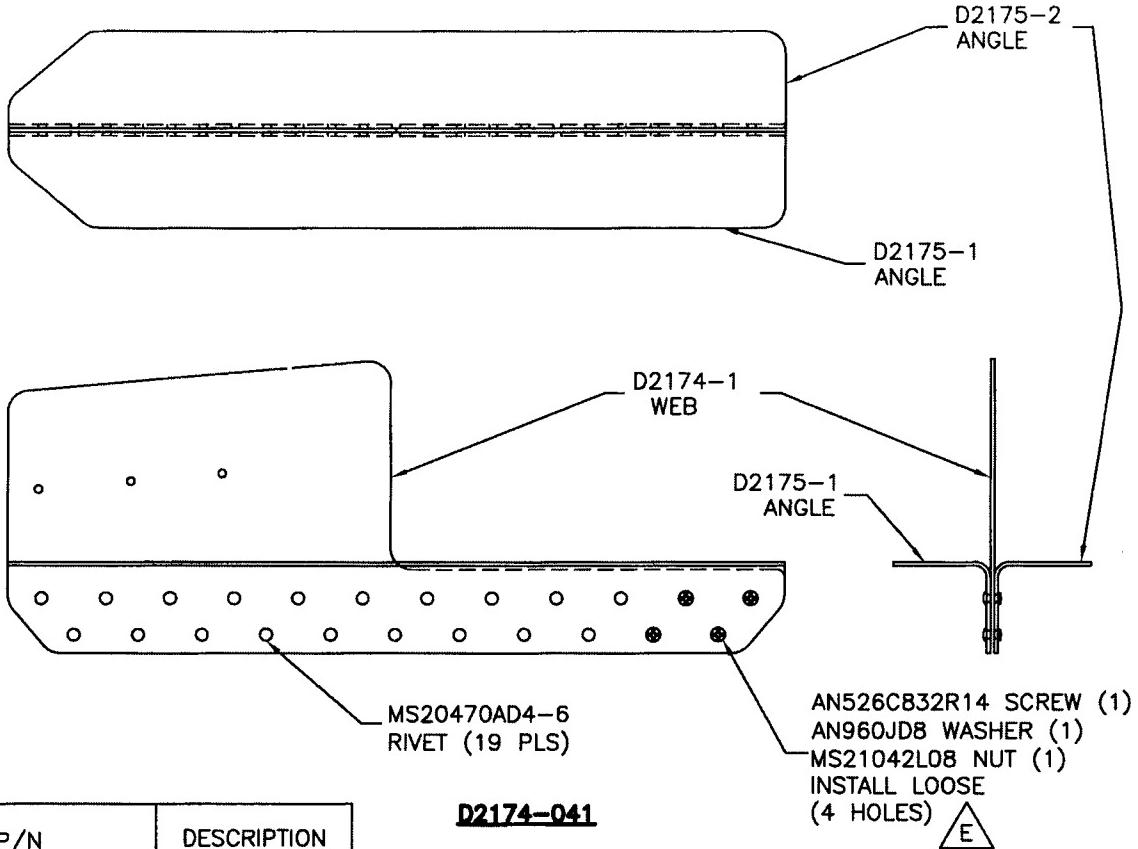
DAS

Measured by:	Jm	Audited by:	27 9-89	Prototype Approval:	N/A
Date:	13-09-23.	Date:	13-9-27	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.08.12	New Issue	KJ/JLM	
B	07.04.02	Ø0.172 dimension added	KJ/JLM	

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D2174-041

QTY -041	P/N	DESCRIPTION
X	D2174-041	WEB ASSEMBLY
1	D2174-1	WEB
1	D2175-2	ANGLE
1	D2175-1	ANGLE
4	AN526CB32R14	SCREW
4	AN960JD8	WASHER
4	MS21042L08	NUT
19	MS20470AD4-6	RIVET

NOTES:

- 1) FINISH: POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) IDENTIFY WITH P/N D2174-041 USING FIND POINT PERMANENT INK MARKER.

DESIGN RF	DRAWN BY <i>CE</i>	DART AEROSPACE LTD	
CHECKED <i>PH</i>	APPROVED <i>CH</i>	HAWKESBURY, ONTARIO, CANADA	
DATE 06.09.25	DRAWING NO. D2174	REV. E	
		SHEET 1 OF 2	
			SCALE 1:3
A	95.10.25	NEW ISSUE	
B	96.01.18	RE-DRAWN	
C	00.09.11	UPDATE FINISH SPEC.	
D	04.06.03	RE-DESIGN	
E	06.09.25	INC 4 HOLES TO ϕ 0.172; CHG HARDWARE	

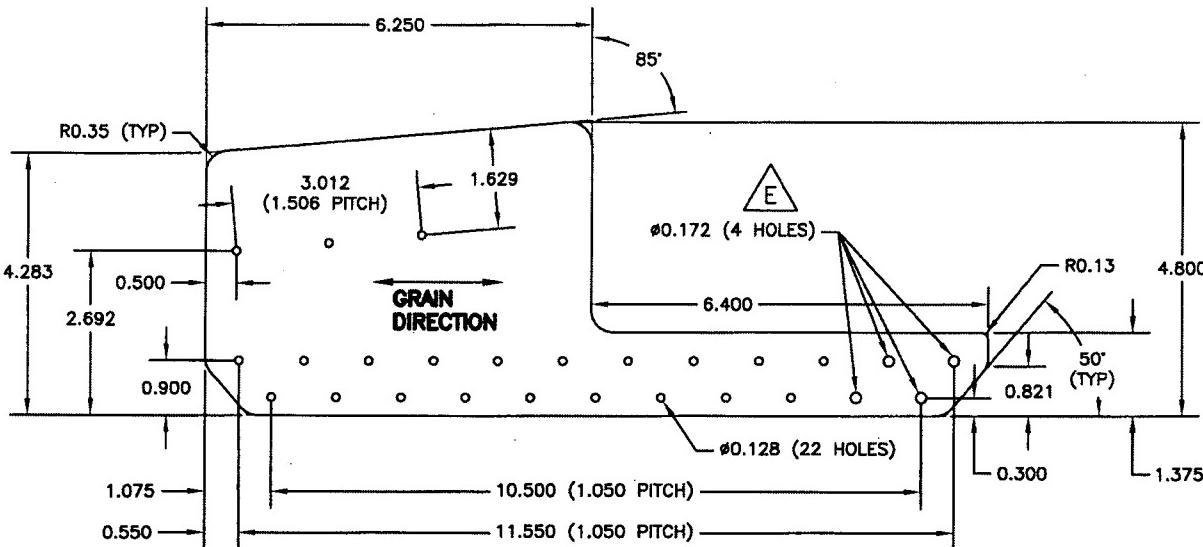
RELEASED
06-10-13

DART

SUPER COPY
PRINT TO
PRINTING
CONTROLLED COPY
PART TO AMENDMENT
NOTICE
WORK ORDER
95710 MLJ
13-01-18

95710
DART

DESIGN RF	DRAWN BY <i>CE</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <i>PH</i>	APPROVED <i>AT</i>	DRAWING NO. D2174
DATE 06.09.25	TITLE WEB	REV. E SHEET 2 OF 2 SCALE 1:3



NOTES:

- 1) MATERIAL: 2024-T3 SHEET (QQ-A-200/4) 0.063 THICK (REF. DART SPEC. M2024T3S.063)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) ALL DIMENSION ARE IN INCHES

RELEASED
At 10-3